HOW TO MACHINE

making,
revamping,
repairs

하우투머신

(주) 우아 | 하우투머신

하우투머신

ISO 9001
ISO 14001
KIBO 조달청

H-310, 270, Gyeonggigwagidae-ro,
Siheung-si, Gyeonggi-do, 15073, Korea

010-2016-9313 ☎ 070-7931-9501
0504-981-5670 ✉ ceo@htmc.kr

주식회사 우아

20, Cheomdan-ro 285beon-gil, Danwon-gu,
Ansan-si, Gyeonggi-do, 15607, Korea

010-2016-9313 ☎ 031-433-9038
0504-981-5670 ✉ ceo@htmc.kr

HOW TO MACHINE
make + revamp + repair

HOW TO MACHINE

"HOW TO MACHINE" HAS BEEN EXPERIENCED MANY YEARS IN THIS INDUSTRIAL MACHINE FIELD AND PROVIDE CUSTOMERS WITH VARIETY OF SOLUTION WHAT THEY NEEDS. In modern business environment age, In the base on High developed techonology, "How to Machine" is aim to make more than detailing microsized, even more improved AI system. such a first half of industrial trends, It requires prodocutivty of manufacturing equipment ,simultaneously high-degree of precision.

In the modern generation with the times, "How to machine " always analyze not only a variety of environments , precise needs for customers satisfaction but also provide high-quality customers centered solution which is our business motto. and Also HTMS are highly focusing on the fastest solution that causing many kind of worse issues from the company.

make • • • localization from the foreign made product

revamp • • • working efficiency

repair • • • Zeronize of industrial disaster

Company History

2018

07.23 Establishment of Company - Siheung Start-up Center

08.01 **Government-funded projects**
- Support projects for the origin of innovative start-ups

09.05 Patent application "Slag removal device
for laser processing paper support plate"

09.13 Acquire Venture Certification

11.20 Appointment of Evaluation Committee for
Small and Medium Business Technology Development
Support Project- Representative Son Hyun-seung

11.27 Patent application "Slag removal device
for laser processing paper support plate"

12.31 Technical data for large, small and medium enterprises and
agricultural and fisheries cooperation foundation is impregnated

2019

02.15 Patent registration
"Slag removal device of laser processor support plate"

08.23 Patent application
"Slag removal device of laser processor support plate"

09.05 PCT application: KR/2019/011513

11.02 **German International Idea Invention**
New Product Exhibition (INEA) - Gold Prize Winner

2020

03.16 **Government-funded Business Agreement**
- Start-up Success Package Support Project

06.04 US Patent Application "Slag Removal Apparatus"

06.08 Transfer of Company - Gyeonggi University of Science and
Technology 1st Small and Medium Business Hall

06.15 European Patent Application "Slag Removal Apparatus"

08.03 **Government-sponsored business agreement**
- "The stepping stone business project" for start-up
growth technology development project

10.01 **Government Support Business Agreement**
- Export Support Program

10.12 **Government Assistance Agreement - Commercialization**
Link Knowledge Property Evaluation Support Project

10.14 Establishment of WOOAH Corporation

10.20 China Patent Application "除渣装置"

11.13 Factory Registration

12.11 Obtaining ISO Certification

Certificate
of Registration

하우투머신

위 회사의 품질경영시스템이 아래의 인증규격에 적합함을 인증합니다.

ISO 9001:2015

인 증 범 위
산업기계의 설계, 개발 및 제조

인증등록번호: GSR-Q-841
최초발행일자: 2020. 12. 11.
인증발행일자: 2020. 12. 11.
인증유효기간: 2023. 12. 10.

President

글로벌시스템인증원(주)

Certificate
of Registration

하우투머신

위 회사의 환경경영시스템이 아래의 인증규격에 적합함을 인증합니다.

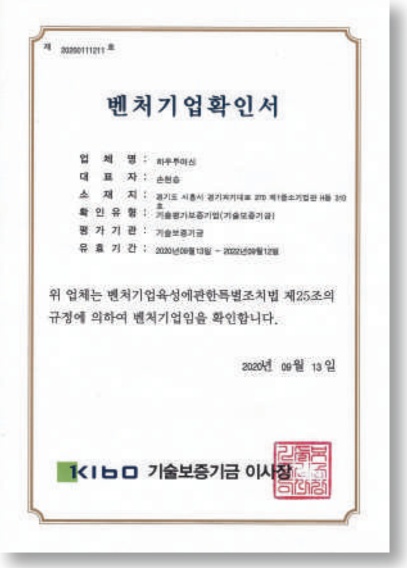
ISO 14001:2015

인 증 범 위
산업기계의 설계, 개발 및 제조

인증등록번호: GSR-E-841
최초발행일자: 2020. 12. 11.
인증발행일자: 2020. 12. 11.
인증유효기간: 2023. 12. 10.

President

글로벌시스템인증원(주)



제 20200111211 호

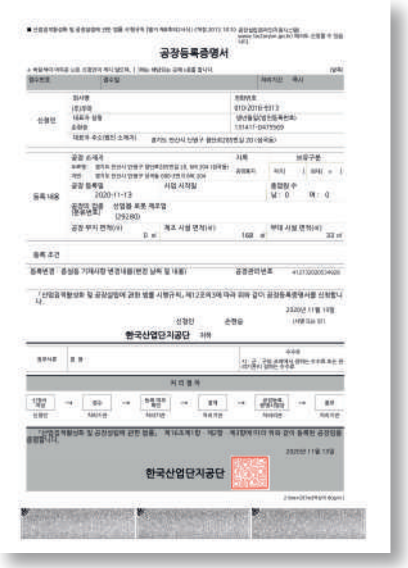
벤처기업확인서

업 체 명 : 하우투머신
대 표 자 : 손현승
소 재 지 : 경기도 시흥시 경기과기대로 270 제1중소기업관 ... 310호
확 인 유 형 : 기술평가보증기업(기술보증기금)
평 가 기 관 : 기술보증기금
유 효 기 간 : 2020년09월13일 ~ 2022년09월12일

위 업체는 벤처기업육성에관한특별조치법 제25조의 규정에 의하여 벤처기업임을 확인합니다.

2020년 09월 13일

KIBO 기술보증기금 이사장



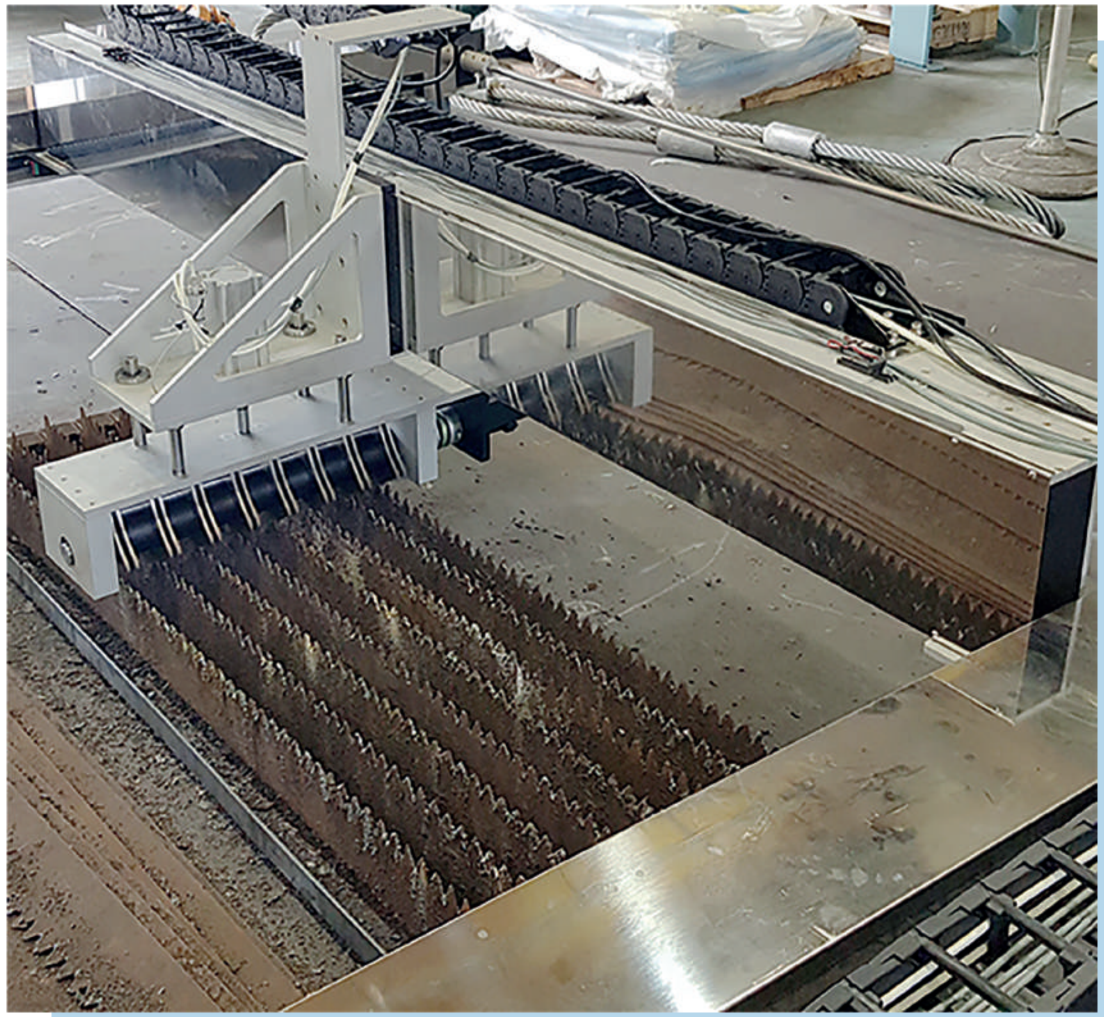
공장등록증명서

2020-11-13

한국산업단지공단

Major business

Grid Scraper



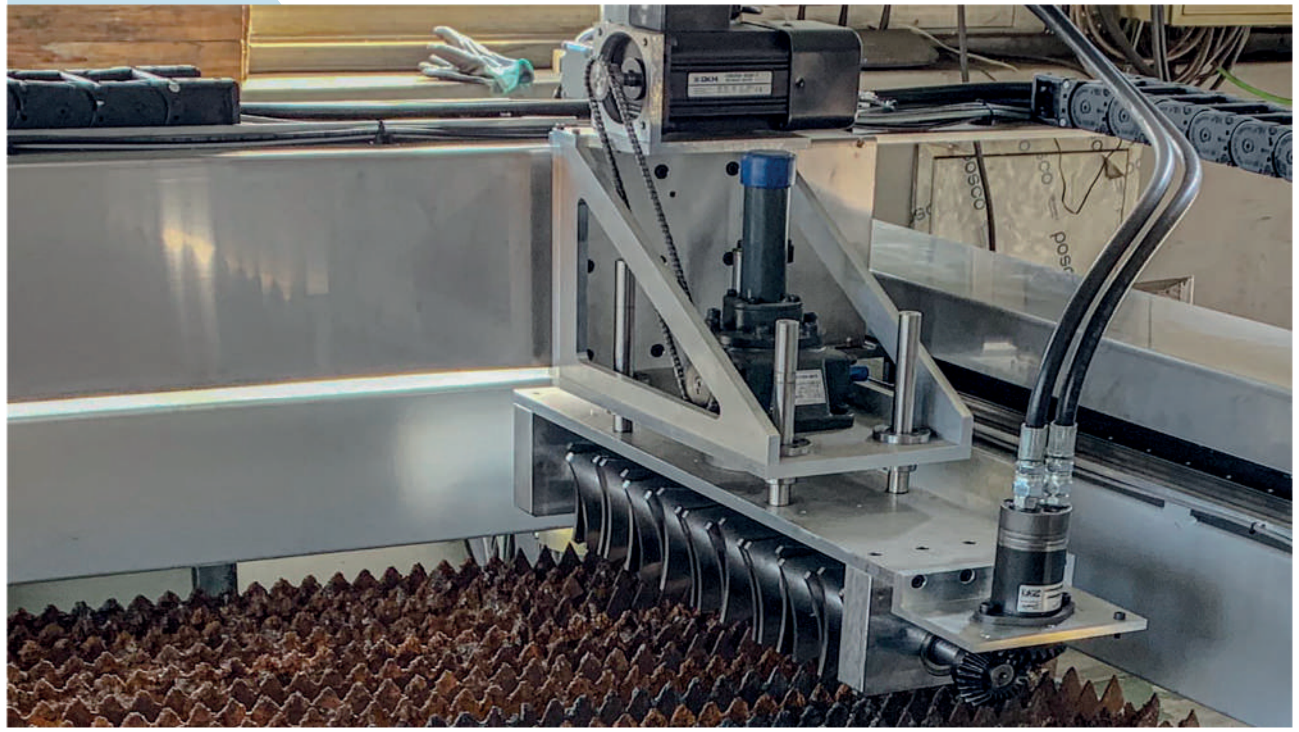
Grid Scraper

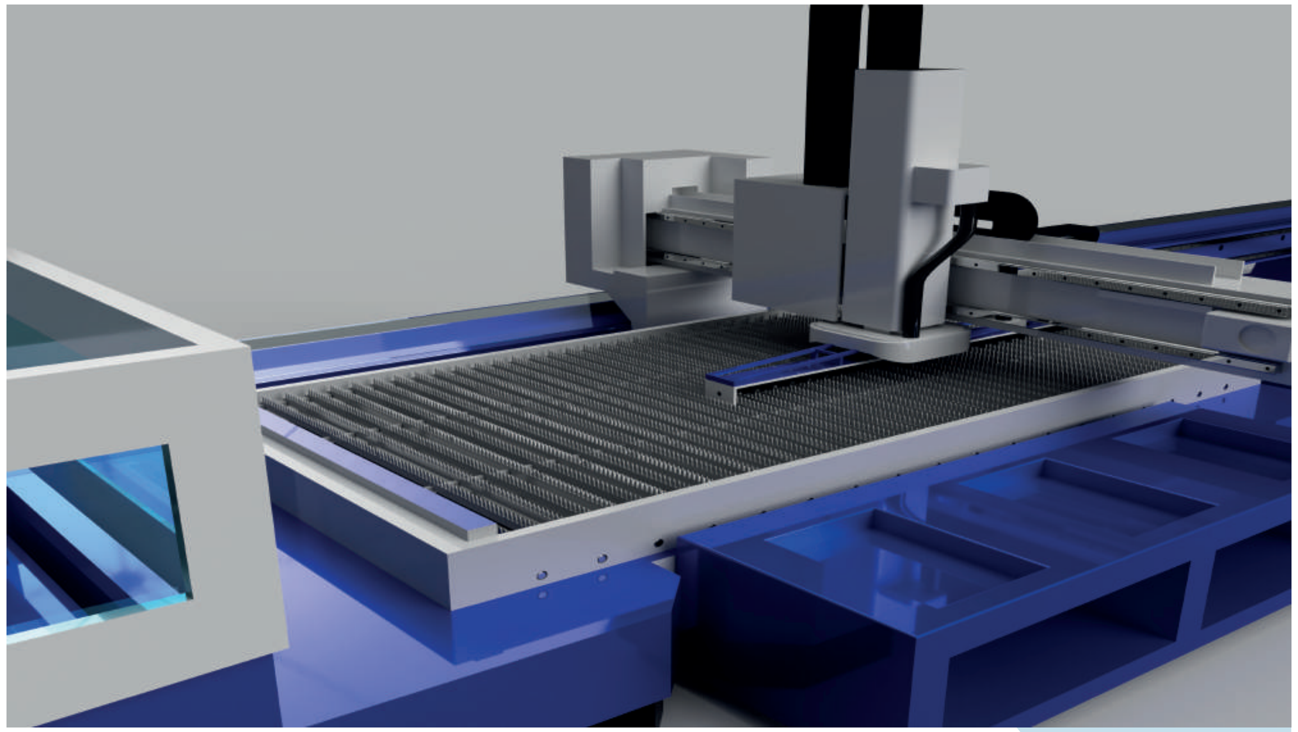
Laser processing machine in the process of creating material with Laser Processing Machine,Slag that caused by Grid make a lower precision, a collision with processor head and cause a lot of issues. in order to solve this issue by slag, We developed Grid Scraper "HTMS-2019 for removing slag.

HTMS-2019 get rid of slags of laser processor grid automaticly at the same time. while operating in the production process , we could not discontinue operation. And perform more efficient removing slag, so that it saves the cost causing by grid effectively.

Model no.	HTMS-2018	HTMS-2019	HTMS-2020
size(mm)	2,823×3,277×687	3,240×2,048×450	Customizing
Input voltage	220V 3P	220V 3P	◎
Blade(row)	8(series)	10(bevel)	20(bevel)
Stroke	1,600×1,800×100	2,100×1,000×100	◎
RPM	600	-	◎
Operation pace	-	13.3(m/min)	◎

HTMS-2019





HTMS-2020

Core-Competitiveness

	Existing Technology	development technology
Range of removal	1 row	8/10/20 row
Removal ratio	70%	85%
Working method	Work by manual	Machine Automation

Saving the relating cost

Cost for replacing grid and cleaning
Repair and Replace when break down the laser head
Collecting possibly initial introduction cost within 1.5 year

Improvement of working environment

Operating time when removing slag and work intensity -> decrease
possibly removing slag while operation

Industrial Accident prevention

Substitute machine automation from the labor work

EHRENURKUNDE/
CERTIFICATE OF HONOUR

iENA 2019

Internationale Fachmesse »Ideen-Erfindungen-Neuheiten« Nürnberg

International Trade Fair »Ideas-Inventions-New Products« Nuremberg

Sohn Hyeon-seung, Howtomachine
Korea Invention Promotion
Association KIPA

KOREA

wurde für hervorragende Leistungen eine /
was awarded with

Goldmedaille

verliehen. /
for outstanding performances.

Erfindung / Neuheit – invention / new product
Vorrichtung zur Schlackenentfernung von der Trägerplatte von Laser-Bearbeitungsmaschinen
Slag removing device of laser processing machine support plate

2. November 2019

International Jury of iENA 2019	International Jury of iENA 2019
Wagner E.	
Prof. Dr. Ing. Elmar Wagner Vorsitzender/Chairman	Hartung Neubauer 2. Vorsitzender/Vice Chairman

<INEA 2019 Gold Prize>

Organization chart

Sohn, Hyeon-Seung **president**

2010 Master of Mechanical Engineering,
Incheon National University Graduate School of Engineering

2010 Researcher at Hydrotec Corporation Research Institute

2011 Head of Research Institute of Hongwoo Industrial Machinery Co., Ltd.

2013 Jeonghan, Director of Research Institute for Precision Enterprise

2018 CEO of How to Machine

2018 Evaluation Committee member for Technology Development
Support Project for Small and Medium Enterprises

2019 Evaluating the Public Purchase System

Completion of multiple national projects

10th Graduation of Young Entrepreneurship Military Academy

⋮

R&D

It is a department in charge of product development based on basic research and research results, and plays a key role in planning and conducting various projects of HOW TO MACHINE and maximizing business performance.

S&MD

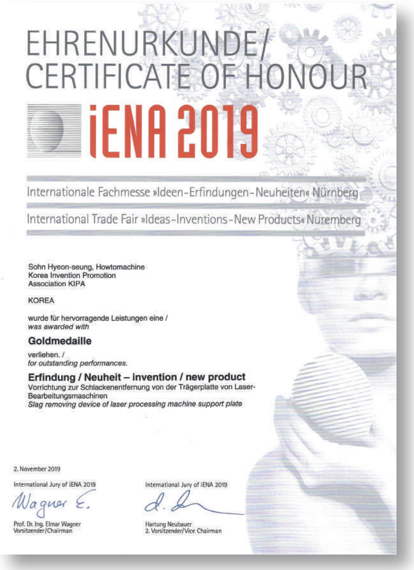
in charge of marketing product planning and sales, and I am in charge of planning, promoting, and selling products of How to Machine.

F&A

The Asset Management department responsible for the company's financial and accounting, managing the overall performance of How To Machine, and executing funds.

Manufacturing facility

Current status of securing intellectual property rights



EHRENURKUNDE/
CERTIFICATE OF HONOUR
iENA 2019

Internationale Fachmesse »Ideen-Erfindungen-Neuheiten« Nürnberg
International Trade Fair »Ideas-Inventions-New Products« Nuremberg

Sohn Hyeon-seung, Howtomachine
Korea Invention Promotion
Association KIPA

KOREA

wurde für hervorragende Leistungen eine /
was awarded with

Goldmedaille

verliehen. /
for outstanding performances.

Erfindung / Neuheit – invention / new product
Vorrichtung zur Schlackenentfernung von der Trägerplatte von Laser-Bearbeitungsmaschinen
Slag removing device of laser processing machine support plate

2. November 2019

International Jury of iENA 2019
Wagner E.
Prof. Dr. Ing. Elmar Wagner
Vorsitzender/Chairman

International Jury of iENA 2019
Hartung Neubauer
2. Vorsitzender/Vice Chairman

<INEA 2019 Gold Prize>

CERTIFICATE OF PATENT

Patent Number 10-1951154

Application Number 10-2018-0106098
Filing Date 2018. 09. 05.
Registration Date 2019. 02. 15.

Title of the Invention
Slag removing device of laser processing machine support plate

Patentee
Hyeon-Seung SOHN(800505-*******)
122-202, 77, Jungsimsangga-ro, Siheung-si, Gyeonggi-do, Republic of Korea

Inventor
Hyeon-Seung SOHN
122-202, 77, Jungsimsangga-ro, Siheung-si, Gyeonggi-do, Republic of Korea

This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2019. 03. 27.

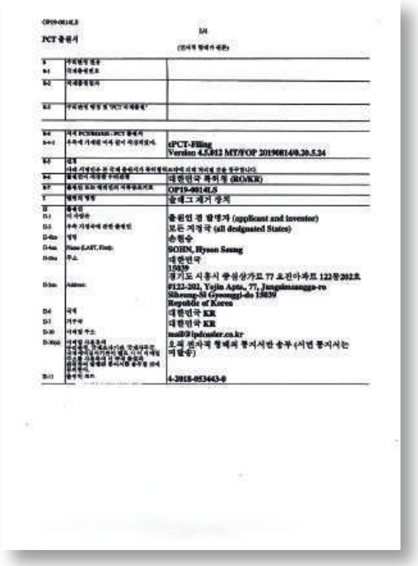
Check your current registration with QR code

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

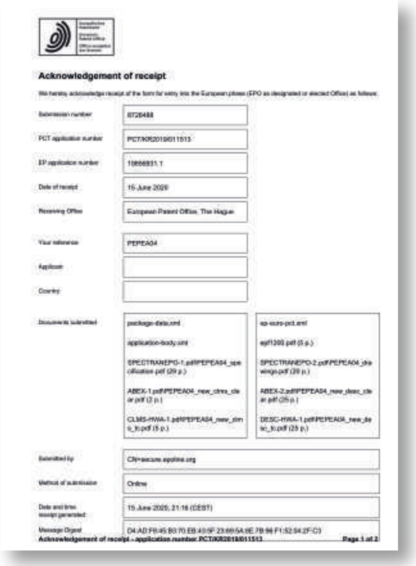
박 원주

특허청
Korean Intellectual Property Office

<a domestic patent certificate>

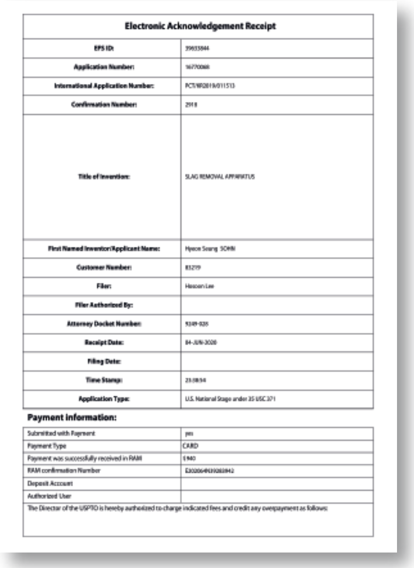


<PCT application form>



Acknowledgement of receipt

<European patent>



Electronic Acknowledgement Receipt

<U.S. Patent>

<Chinese patent>